

**GILA RIVER BASIN**

**09512500 AGUA FRIA RIVER NEAR MAYER, AZ**

**LOCATION**--Lat 34°18'55", long 112°03'48", in NW<sub>1/4</sub>SE<sub>1/4</sub> sec. 20, T.11 N., R.3 E., Yavapai County, Hydrologic Unit 15070102, on left bank at Sycamore damsite, 700 ft downstream from Big Bug Creek and 12 mi southeast of Mayer.

**DRAINAGE AREA**--585 mi<sup>2</sup>.

**PERIOD OF RECORD**--Jan. 1940 to current year.

**REVISED RECORDS**--WDR AZ-88-1: 1987. WDR AZ-89-1: Drainage area.

**GAGE**--Water-stage recorder. Datum of gage is 3,434 ft above sea level.

**REMARKS**--Records fair, except for estimated daily discharges, which are poor. Diversions above station for mining and irrigation of about 600 acres.

**EXTREMES FOR PERIOD OF RECORD**--Maximum discharge, 33,100 ft<sup>3</sup>/s Feb. 19, 1980, from rating curve extended above 3,400 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow, gage height, 15.76 ft, from mean of surge, inside highwater mark 16.03 ft, floodmark 18.97 ft; negligible flow at times during the summer months in most previous years when entire flow was diverted to Perry Canal above station and flow past gage was seepage only.

**EXTREMES FOR CURRENT YEAR**--Peak discharges greater than base discharge of 2,300 ft<sup>3</sup>/s from rating curve extended as explained above, and (or) maximum (\*):

	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
	July 14 .....	2030	*4,050	*7.89
	July 27 .....	1920	2,300	6.49
	Aug. 6 .....	1715	2,670	6.83

Minimum daily discharge, 0.02 ft<sup>3</sup>/s June 27; July 3-4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.46	0.29	0.59	1.6	2.6	3.3	2.7	1.4	0.31	0.03	0.30	0.23
2	0.43	0.24	0.60	1.6	2.7	3.3	6.2	1.2	0.22	0.03	0.27	0.23
3	0.43	0.11	0.65	1.6	2.8	3.2	6.1	1.1	0.22	0.02	0.27	0.23
4	0.40	0.29	0.66	1.6	3.0	3.2	5.5	0.96	0.20	0.02	0.26	0.40
5	0.38	0.30	0.66	1.7	2.9	3.3	6.9	0.91	0.18	0.03	0.27	0.61
6	0.35	0.33	0.69	1.8	2.8	3.2	6.9	0.84	0.15	0.04	169	0.67
7	0.35	0.36	0.74	1.9	2.8	3.3	11	0.81	0.14	0.04	e35	1.3
8	0.33	0.32	0.78	1.9	2.7	3.3	43	0.79	0.14	0.05	e1.5	1.4
9	0.33	0.30	0.82	2.0	2.9	3.3	21	0.74	0.12	0.06	e0.50	1.5
10	0.32	0.34	0.87	2.0	2.8	3.4	11	0.72	0.11	0.07	0.34	1.5
11	0.31	0.39	0.93	2.0	2.8	3.5	5.8	0.71	0.11	0.03	0.31	1.6
12	0.28	0.73	0.98	2.0	2.7	11	3.8	0.75	0.10	0.06	0.27	1.5
13	0.27	15	1.0	2.1	2.7	8.7	3.2	0.73	0.09	0.09	11	1.2
14	0.25	0.59	1.1	2.1	2.8	5.2	2.8	0.68	0.08	183	e7.0	1.3
15	0.24	0.53	1.1	2.1	2.7	4.8	2.6	0.63	0.06	e34	e0.85	1.4
16	0.24	0.50	1.1	2.1	2.7	4.4	2.5	0.67	0.06	e1.1	e0.50	1.4
17	0.23	0.52	1.2	2.1	2.6	3.6	2.4	0.88	0.04	1.0	0.37	1.4
18	0.21	0.51	1.3	2.2	2.6	2.9	2.3	0.87	0.03	8.6	0.34	6.4
19	0.16	0.48	1.4	2.2	2.6	2.6	2.3	0.87	0.04	e15	0.33	132
20	0.15	0.52	1.4	2.3	2.7	2.4	1.8	0.90	0.03	0.69	0.29	e5.0
21	0.13	0.50	1.4	2.3	2.7	2.7	1.8	0.90	0.03	0.52	0.31	e1.0
22	0.13	0.49	1.4	2.4	2.7	2.6	1.7	0.73	0.03	0.37	0.25	e0.65
23	0.11	0.52	1.4	2.4	3.9	2.9	1.6	0.72	0.04	0.37	0.24	0.48
24	0.11	0.55	1.5	2.5	3.8	2.5	1.6	0.71	0.05	0.35	0.25	0.41
25	0.14	0.51	1.5	2.5	3.6	2.5	2.1	0.69	0.04	0.34	0.25	0.38
26	0.17	0.54	1.6	2.5	3.3	2.5	2.2	0.69	0.03	0.33	0.25	0.36
27	0.14	0.57	1.6	2.5	3.8	2.9	1.9	0.55	0.02	180	0.25	0.33
28	0.11	0.56	1.6	2.5	3.8	3.4	1.5	0.35	0.03	e13	0.24	0.34
29	0.11	0.59	1.6	2.6	3.5	2.6	1.5	0.35	0.03	0.52	0.24	0.35
30	0.14	0.60	1.6	2.6	---	2.6	1.5	0.37	0.03	0.40	0.23	0.34
31	0.26	---	1.6	2.7	---	2.6	---	0.34	---	0.34	0.23	---
TOTAL	7.67	28.08	35.37	66.4	86.0	111.7	167.2	23.56	2.76	440.50	231.71	165.91
MEAN	0.25	0.94	1.14	2.14	2.97	3.60	5.57	0.76	0.09	14.2	7.47	5.53
MAX	0.46	15	1.6	2.7	3.9	11	43	1.4	0.31	183	169	132
MIN	0.11	0.11	0.59	1.6	2.6	2.4	1.5	0.34	0.02	0.02	0.23	0.23
AC-FT	15	56	70	132	171	222	332	47	5.5	874	460	329
CFSM	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.02	0.01	0.01
IN.	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.03	0.01	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	8.92	8.95	27.5	30.8	59.5	48.1	19.1	3.25	2.50	10.6	30.8	17.2
MAX	223	146	453	718	1179	389	314	19.6	29.7	48.2	244	187
(WY)	1973	1988	1966	1993	1980	1991	1941	1941	1940	1955	1951	1970
MIN	0.14	0.10	0.08	0.07	0.02	0.01	0.00	0.03	0.01	0.15	0.31	0.16
(WY)	1951	1950	1951	1951	1951	1951	1951	1951	1965	1960	1962	2001

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1940 - 2004

ANNUAL TOTAL	2746.04		1366.86									
ANNUAL MEAN	7.52		3.73									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	233	Aug 14		183	Jul 14		7290	Feb 20	1980			
LOWEST DAILY MEAN	0.11	Oct 23		0.02	Jun 27		0.00	Dec 2	1950			
ANNUAL SEVEN-DAY MINIMUM	0.13	Oct 23		0.03	Jun 27		0.00	Dec 2	1950			
ANNUAL RUNOFF (AC-FT)	5450		2710				16100					
ANNUAL RUNOFF (CFSM)	0.013		0.006				0.038					
ANNUAL RUNOFF (INCHES)	0.17		0.09				0.52					
10 PERCENT EXCEEDS	11		3.5				18					
50 PERCENT EXCEEDS	1.3		0.85				2.1					
90 PERCENT EXCEEDS	0.34		0.11				0.30					

e Estimated